Defibrillators

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All clinical areas should have immediate access to an automated external defibrillator (AED) according to the Resuscitation Council's guidance which is endorsed by the General Dental Council (GDC).

If you do not have a defibrillator then you must carry out a robust risk assessment outlining how you would access a defibrillator within minutes of a cardiac arrest. Realistically you will put that patient's life at risk and put yourself in a very compromised dento-legal position.

Simply put, if you see patients you should have a defibrillator.

Preventing a medical emergency

It is imperative that you hold a current and accurate medical history for all patients. The medical history form should be verified by a verbal history taken by the dental professional.

Remember a heart attack is a blockage to an artery supplying the heart with blood whereas a cardiac arrest is due to an abnormality of the heart's electrical rhythm.

Someone who is having a heart attack may go on to have a cardiac arrest.

Be vigilant of the signs and symptoms that may occur before a cardiac arrest, including but not limited to changes in skin colour, breathing patterns and pulse rate all of which may be early warning signs. Do not insist on the completion of dental treatment. Management of the medical emergency should occur immediately.

AEDs allow all team members who have received training to attempt defibrillation safely.

What is a defibrillator?

According to the British Heart Foundation, a defibrillator is a device that gives a high energy electric shock to the heart of someone who is in cardiac arrest. The high energy shock is called defibrillation, and it's an essential part in trying to save the life of someone who's in cardiac arrest. It delivers a controlled electric shock to the heart allowing for a restoration in the heart's rhythm.

Scientific evidence confirms that defibrillation within minutes of a cardiac arrest can significantly improve survival rates.

Chain of survival

Whilst defibrillation is of primary importance in the chain of survival, it is imperative to recognise the symptoms early and carry out cardiopulmonary resuscitation (CPR) at a ratio of 30 compressions: 2 rescue breaths should commence immediately while a colleague calls 999 and another person gets the AED. Continue the CPR, if possible, while defibrillation is being undertaken.

Are you prepared?

You and your dental team need

to be prepared in the event, albeit rare, of someone experiencing a cardiac event at your practice. At least two appropriately trained people should be available to deal with a potential medical emergency.

All new staff should have an induction regarding medical emergencies. Resuscitation training should be current and at least updated annually. Creating and role-playing various scenarios will increase confidence. All members of staff must be fully aware of their roles and responsibilities during a medical emergency.

Location of a defibrillator

Store the AED in a central and easily accessible location. Often practices will mount these in the reception area. All members of staff should know where to access the AED. Follow manufacturer's instructions at all times and ensure to carry out weekly checks on the AED.

A standard AED sign should be displayed and visible from the outside of the practice.

Register the AED with your local ambulance service to ensure prompt access by emergency services.

What else do you need?

You will require adhesive defibrillator pads and a spare set is recommended. If you see children, then ensure your AED is able to be used and have both adult and children pads. The adult pads can be used on anyone eight years of age or over. Some AEDs will require separate pads for children and may have a different mode to use while treating children. If you do not have paediatric pads to hand then you can use adult pads on a child over one year of age. Practices should also have readily available scissors and a razor if required.

Conclusion

Above all you need to have a confident and coherent team willing and able to manage the medical emergency.

The Resuscitation Council will be updating their guidelines later in the year, so watch this space. ♦

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